Contents

El Niño along the west coast of North America 1
—F. P. Chavez, C. A. Collins, A. Huyer and D. L. Mackas

Evolution of oceanographic conditions off Baja California: 1997–1999 7
—R. Durazo and T. R. Baumgartner

Plankton response to El Niño 1997–1998 and La Niña 1999 in the southern region of the California Current 33
—B. E. Lavaniegos, L. C. Jiménez-Pérez and G. Gaxiola-Castro

Dynamic evolution of the 1997–1999 El Niño–La Niña cycle in the southern California Current System 59
—R. J. Lynn and S. J. Bograd

The evolution and depth structure of shelf and slope temperatures and velocities during the 1997–1998 El Niño near Point Conception, California 77
—E. P. Dever and C. D. Winant

Effects of the 1997–98 El Niño on seasonal variations in suspended and sinking particles in the Santa Barbara basin 105
—R. F. Shipe, U. Passow, M. A. Brzezinski, W. M. Graham, D. K. Pak, D. A. Siegel and A. L. Alldredge

Changes in the hydrography of Central California waters associated with the 1997–98 El Niño 129
—C. A. Collins, C. G. Castro, H. Asanuma, T. A. Rago, S.-K. Han, R. Durazo and F. P. Chavez

Sea level response to ENSO along the central California coast: how the 1997–1998 event compares with the historic record 149
—H. F. Ryan and M. Noble

Nutrient variability during El Niño 1997–98 in the California current system off central California 171
—C. G. Castro, C. A. Collins, P. Walz, J. T. Pennington, R. P. Michisaki, G. Friederich and F. P. Chavez

Inorganic carbon in the central California upwelling system during the 1997–1999 El Niño–La Niña event 185
—G. E. Friederich, P. M. Walz, M. G. Burczynski and F. P. Chavez

Biological and chemical consequences of the 1997–1998 El Niño in central California waters 205
—F. P. Chavez, J. T. Pennington, C. G. Castro, J. P. Ryan, R. P. Michisaki, B. Schlining, P. Walz, K. R. Buck, A. McFadyen and C. A. Collins

Multi-platform remote sensing of new production in central California during the 1997–1998 El Niño 233
—R. M. Kudela and F. P. Chavez

Copepod communities in Monterey Bay during the 1997–1999 El Niño and La Niña 251
—R. R. Hopcroft, C. Clarke and F. P. Chavez

Effects of the 1997–1999 El Niño and La Niña events on zooplankton abundance and euphausiid community composition within the Monterey Bay coastal upwelling system 265
—B. B. Marinovic, D. A. Croll, N. Gong, S. R. Benson and F. P. Chavez

Changes in the cetacean assemblage of a coastal upwelling ecosystem during El Niño 1997–98 and La Niña 1999 279
—S. R. Benson, D. A. Croll, B. B. Marinovic, F. P. Chavez and J. T. Harvey

Hydrography, nutrients and chlorophyll during El Niño and La Niña 1997–99 winters in the Gulf of the Farallones, California 293
—F. P. Wilkerson, R. C. Dugdale, A. Marchi and C. A. Collins

The coastal ocean off Oregon and northern California during the 1997–8 El Niño 311
—A. Huyer, R. L. Smith and J. Fleischbein

A poleward jet and an equatorward undercurrent observed off Oregon and northern California, during the 1997–98 El Niño 343
—P. M. Kosro

El Niño related variations in nutrient and chlorophyll distributions off Oregon 361
—H. L. Corwith and P. A. Wheeler

The effects of the 1997–99 El Niño/La Niña events on hydrography and zooplankton off the central Oregon coast 381
—W. T. Peterson, J. E. Keister and L. R. Feinberg

Marine nekton off Oregon and the 1997–98 El Niño 399
—W. G. Pearcy

Impact of the 1997–1998 El Niño and 1999 La Niña on nutrient supply in the Gulf of Alaska 405
—F. A. Whitney and D. W. Welch

Zooplankton community composition along the inner portion of Line P during the 1997–1998 El Niño event 423
—D. L. Mackas and M. Galbraith

The 1997–1998 oceanic El Niño signal along the southeast and northeast Pacific boundaries—an altimetric view 439
—P. T. Strub and C. James

The evolution of oceanic and atmospheric anomalies in the northeast Pacific during the El Niño and La Niña events of 1995–2001 459
—F. B. Schwing, T. Murphree, L. deWitt and P. M. Green

A state variable for characterizing water masses and their diffusive stability: spiciness 493
—P. Flament

Introduction to 'The 1997–8 El Niño Atlas of oceanographic conditions along the west coast of North America (23°N–50°N)' 503
—C. G. Castro, T. R. Baumgartner, S. Bograd, R. Castro, F. P. Chavez, C. A. Collins, R. Durazo, J. García, G. Gaxiola-Castro, T. Hayward, A. Huyer, R. Lynn, A. S. Mascarenhas, M. R. D. Robert, R. L. Smith, P. A. Wheeler and F. A. Whitney